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## CLAIMS



1 A bacterial strain, characterized in that it has a  
DNA sequence, at least part of which is capable of  
5 hybridizing with genomic or plasmid DNA of the strain  
deposited on December 5, 2002, under the No. I-2962,  
with the Collection Nationale de Cultures de  
Microorganismes (C.N.C.M.) [French national collection  
of microorganism cultures].

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2. The bacterial strain as claimed in claim 1,  
characterized in that at least 70% of its genome is  
capable of hybridizing with the DNA of the deposited  
strain.

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3. The bacterial strain as claimed in claim 1 or 2,  
characterized by the sequence SEQ ID No. 1 of the 16S  
rRNA:

GCGTGCCTAATACATGCAAGTCGAGCGCAGGAAGCCGTCTGAACCCTTCGGGGGGACGACGGTGGAAATGA  
GCGGGCGGACG  
GGTGAGTAACACGTAAAGAACCTGCCCATAGGTCTGGGATAACCACGAGAAATCGGGGGCTAATACCGGAT  
GTGTCATCGG  
ACCGCATGGTCCGCTGATGAAAGGCGCTCCGGCGTCGCCCATGGATGGCTTTGCGGTGCATTAGCTAGTT  
GGTGGGGTAA  
CGGCCCACCAAGGCGACGATGCATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGC  
CCAGACTCCT  
ACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGAAAGTCTGATGGAGCAACGCCGCGTGAACGATG  
AAGGCTTTCG  
GGTCGTAAAGTTCTGTTGTAAGGGAAGAACAAGTGCCGCAGGCAATGGCGGCACCTTGACGGTACCTTGC  
GAGAAAGCCA  
CGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAA  
AGCGCGCGCA  
GGCGGCCTCTTAAGTCTGATGTGAAAGCCCCCGGCTCAACCGGGGAGGGCCATTGGAAACTGGGAGGCTT  
GAGTATAGGA  
GAGAAGAGTGGAATTCACGTGTAGCGGTGAAATGCGTAGAGATGTGGAGGAACACCAGTGGCGAAGGCG  
ACTCTTTGGC  
CTATAACTGACGCTGAGGCTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCG  
TAAACGATGA  
GTGCTAGGTGTTGGAGGGTTTCCGCCCTTCAGTGCTGAAGCTAACGCATTAAGCACTCCGCCTGGGGAGT  
ACGGTCGCAA  
GGCTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCTGAAGCAACG  
CGAAGAACCT  
TACCAACTCTTGACATCCCCCTGACCGGTACAGAGATGTACCTTCCCCTTCGGGGGCAGGGGTGACAGGT  
GGTGCATGGT  
TGTCGTGAGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTGTCCTTAGTTGCC  
AGCATTAAGT  
TGGGCACTCTAGGGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCC  
TTATGAGTTG  
GGCTACACACGTGCTACAATGGACGGTACAAAGGGCAGCGAAGCCGCGAGGTGGAGCCAATCCCAGAAAG  
CCGTTCTCAG

TTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATCGCTAGTAATCGCAGGTCAGCATACTGCG  
GTGAATACGT  
TCCCGGGTCTTGTACACACCGCCCGTCACACCACGAGAGTTTGCAACACCCGAAGTCGGTGAGGTAACCG  
TAAGGAGCCA  
GCCGCCGAAGGTGGGGCAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGA

or a sequence having more than 97% similarity with  
SEQ ID No. 1.

- 5     4.     The bacterial strain as claimed in any one of  
          claims 1 to 3, characterized in that it is thermo-  
          resistant, saccharolytic and amylolytic and/or capable  
          of producing L(+) lactate.
- 10    5.     The strain as claimed in any one of claims 1 to 4,  
          characterized by growth properties at temperatures of  
          the order of 40 to 50°C, at a pH of 5.4 to 9.15, with  
          an optimum for growth at 45°C, at a pH of approximately  
          7.
- 15    6.     The bacterial strain as claimed in any one of  
          claims 1 to 5, characterized by a guanine plus cytosine  
          content in its DNA of approximately 50 mol%.
- 20    7.     The bacterial strain deposited with the C.N.C.M.  
          on December 5, 2002, under the number I-2962.
- 25    8.     A method for culturing the bacterial strain as  
          claimed in any one of claims 1 to 7, characterized in  
          that the process is carried out under facultative  
          anaerobic conditions, at a pH of approximately 5.4 to  
          9.15, at 37°C, in particular of 6.5 to 7.5, in a basic  
          medium containing a sugar that can be used as an energy  
          source by this strain.
- 30    9.     The use of the bacterial strain as claimed in one  
          of claims 1 to 7, in food fermentation processes.
- 35    10.    A method for producing metabolites such as  
          L(+) lactate, characterized in that it comprises:  
          -     culturing a bacterial strain as claimed in any one

of claims 1 to 7, under conditions suitable for its development and for the production of the desired metabolite,

- recovering the metabolites produced, isolating the  
5 desired metabolite and purifying it.